

Appl. No. 10/089,112
Amd. Dated February 23, 2005
Reply to Office Action of December 16, 2004

REMARKS/ARGUMENTS

Reconsideration of the present application, as amended, is respectfully requested.

Of previously pending claims 2-7, 9, 10, 12-15, 17-22, 24-29 and 31-35, claims 2-7, 9, 10, 12-14 were allowed, and claims 15, 17-22, 24-29 and 31-35 were rejected. Claim 6 was objected to for the lack of antecedent basis for the word, "house," and "housing" was suggested as an appropriate substitution. Accordingly, the applicants have made the suggested correction.

Substantively, claims 15, 17, 18, 22, 24, 29, 31 and 32 were rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 6,631,018, which issued October 7, 2003 to D. Milton *et al.*, in view of U.S. Patent No. 5,778,132, which issued July 7, 1998 to A. Csipkes *et al.* The Examiner reasoned with respect to the rejection of independent claims 15, 22 and 29, that:

...Milton *et al.* discloses an apparatus comprising a pair of add/drop modules (Fig. 1, #4-8) corresponding to one of a plurality of channels (Fig. 3, #2 and 3), each module comprising an add device (col. 4, lines 62-63, and Fig. 3, #10) as an equivalent means for adding light to a first one of the fiber paths (Fig. 3, #2), a drop device (Fig. 3, #11) as an equivalent means for deflecting light to a portion of light from a second one of the fiber paths (Fig. 3, #3), wherein the pair have identical construction and the first and second paths, corresponding to a plurality of channels, carry light in opposite directions (Fig. 3), an enclosure for the add/drop devices (Fig. 1, #4-8), a first connection to the enclosure to connect to one fiber path (Fig. 1, #4, top left side), a second connection to the enclosure to connect to the other fiber path (Fig. 1, #4, bottom left side), and a second optical fiber extending from the enclosure (Fig. 1, #4, fiber from bottom right side) and coupling to a second connection to one end connecting the neighboring add/drop module (Fig. 1, #5).

However, Milton *et al.* does not disclose a housing with connectors.

Csipkes *et al.* teaches a housing with connectors (Fig. 7C, #160, and col. 6, lines 46-50).

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It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to incorporate the apparatus of Milton et al. with the housing of Csipkes et al., since one would be motivated to make such a modification to simplify manufacture thus increasing product yields (col. 2, lines 28-31) as implied from Csipkes et al.

The applicants respectfully disagree and are uncertain how the Examiner is using the cited Milton patent. The terminology in the cited Milton patent and in the applicants' claims and specification are in general agreement, i.e., that Milton's optical fibers 2 and 3 each carry a plurality of wavelengths, each wavelength described as a channel in the applicants' specification (see the applicants' replacement paragraph beginning at page 3, line 3, for example), in opposite directions. Add/drop nodes 4-8 are connected to both fibers 2 and 3. However, Fig. 1 of Milton does not show any structure of the add/drop nodes 4-8. Hence the applicants do not understand how a pair of add/drop modules which are recited as elements of an add/drop node can be identified in Fig. 1. See claims 15, 22 and 29.

Fig. 3 does illustrate the organization of a node 4-8, i.e., "Fig. 3 is a block functional diagram of a network node". Col. 4, line 1. Referring to Fig. 3, the applicants assume that the demultiplexers 10 and multiplexers 11, which the Examiner identified as the applicants' add and drop devices, are instead to be identified with the claimed add/drop modules. As such, the demultiplexers 10 and multiplexers 11 grouped into pairs of a MOX (MUX) 11 for optical fiber 2 (or 3) and a DEMUX (DEMOX) 10 for optical fiber 3 (or 2). However, it should be noted that the claims recite that each pair of add/drop modules correspond to "one of the plurality of channels," while each MOX (MUX) 11 and DEMUX (DEMOX) 10 correspond to a plurality of channels. "Physically, the MUX/DEMUX 10, 11 each consist of a single high performance optical interference filter that transmits the selected band to be dropped/added and passively reflects the remaining bands (emphasis added)." Col. 4, lines 64-67. The band is made of a plurality of wavelengths, or channels, in the language of the claims. "Typically there are either two or four wavelengths per band." Col. 4, lines 35-36. Hence pairs of demultiplexers 10 and multiplexers 11 do not meet the language of claims 15, 22 and 29.

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Furthermore, the filters 18 and 19 cannot be considered to be the applicants' claimed add and drop devices since an add device and drop device which form part of each add/drop module which corresponds to one of the plurality channels. Instead, the optical filter 19 "separates the dropped band into the individual wavelengths." Col. 5, lines 13-14. The filters 18 "combine the specific band of wavelengths that it is desired to add." Col. 5, lines 28-29. In other words, the purported add and drop devices do not correspond to one of a plurality of channels, but rather to a plurality of channels.


Finally, the cassette housing of the cited Csipkes patent is for an optical amplifier with modularized constituents, and not for each add/drop module, as recited in the applicants' claims. Additionally, the claims recite certain limitations with respect to the housing. For example, claim 15 has "...a first fixed connector attached to the housing to connect to one fiber path; and a first optical fiber extending from the housing and coupling to a first free connector at one end, the first free connector connecting to a neighboring add/drop module; a second fixed connector attached to the housing to connect to the other fiber path; and a second optical fiber extending from the housing and coupling to a second free connector at one end, the second free connector connecting to the neighboring add/drop module...." Claims 22 and 29 have similar language. Nowhere has the Examiner attempted to identify these limitations with elements of the Csipkes cassette system.

Hence independent claims 15, 22 and 29 are not obvious over the combination of the Milton and Csipkes patents, and should be allowable. Dependent claims 17-21, 24-28, and 31-35 should also be allowable for at least being dependent upon allowable base claims.

Therefore, in view of the amendments above and the remarks directed thereto, the applicants believe that all rejections be withdrawn, that claims 2-7, 9, 10, 12-15, 17-22, 24-29 and 31-35 be allowed, and the case be passed to issue. If a telephone conference would in any way expedite the prosecution of the application, the Examiner is requested to call the undersigned at (408) 446-7687 without hesitation.

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Respectfully submitted,



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